

HSM®

OPERATING MANUAL SHREDDER



HSM FA 400.2

english

Keep in a safe place for future use!



1.513.999.112 – 0702

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1. Proper use, warranty

The shredder is exclusively designed for destroying paper and cardboard, as well as store cards, credit cards, CD-ROMs and floppy disks. Its sturdy drive mechanism is not damaged by paper clips and staples.

Our general business conditions are applicable. We provide a one year warranty for the document shredder. The warranty period is 6 months when used in multiple shifts. This warranty excludes wear, damage due to improper handling, natural depreciation, and actions taken by third parties.

2. Safety instructions



Caution:

It is prohibited to operate one only machine of a combination-version machine. Only the combination of document shredder and HSM baling press fulfils the requirements of EN 294 (Safety clearances).

- Read the operating manual before starting up the shredder.
- Do not remove or modify safety devices which guarantee the safe operation of the machine.
- Observe all safety instructions attached to the machine.
- The shredder may not be operated by anyone under 16 years of age.
- Only open the front door once the machine has come to a standstill.
- Carry out inspection and maintenance regularly.
- Switch off the shredder, disconnect the power plug and call customer service in the following circumstances:
 - Power cables or plugs are damaged
 - Liquid has entered the shredder
 - The shredder has been exposed to rain
 - The machine does not work properly despite the operating manual having been observed
 - The shredder has been damaged



Danger of injury

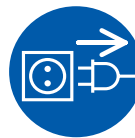
Do not reach into the paper feed opening.

Splinters can cause injury

Before destroying credit cards and store cards, CD-ROMs or floppy disks, you must fit a splinter guard (strip curtain, order no. 1.513.050.445).

Danger of injury during intake

Do not go near the paper feed opening with long hair, loose clothing, ties, scarves, necklaces, bracelets etc. Do not destroy any material which might become tangled, such as tapes, binder ties or foil.



Switch off the shredder and pull out the power plug

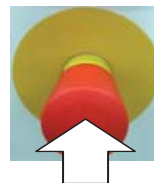
before moving or cleaning the shredder, or any other task outside its normal scope of use.



Maintenance and service tasks may only be performed by HSM customer service and service engineers of our dealers.

Operating controls for your safety

Emergency stop button



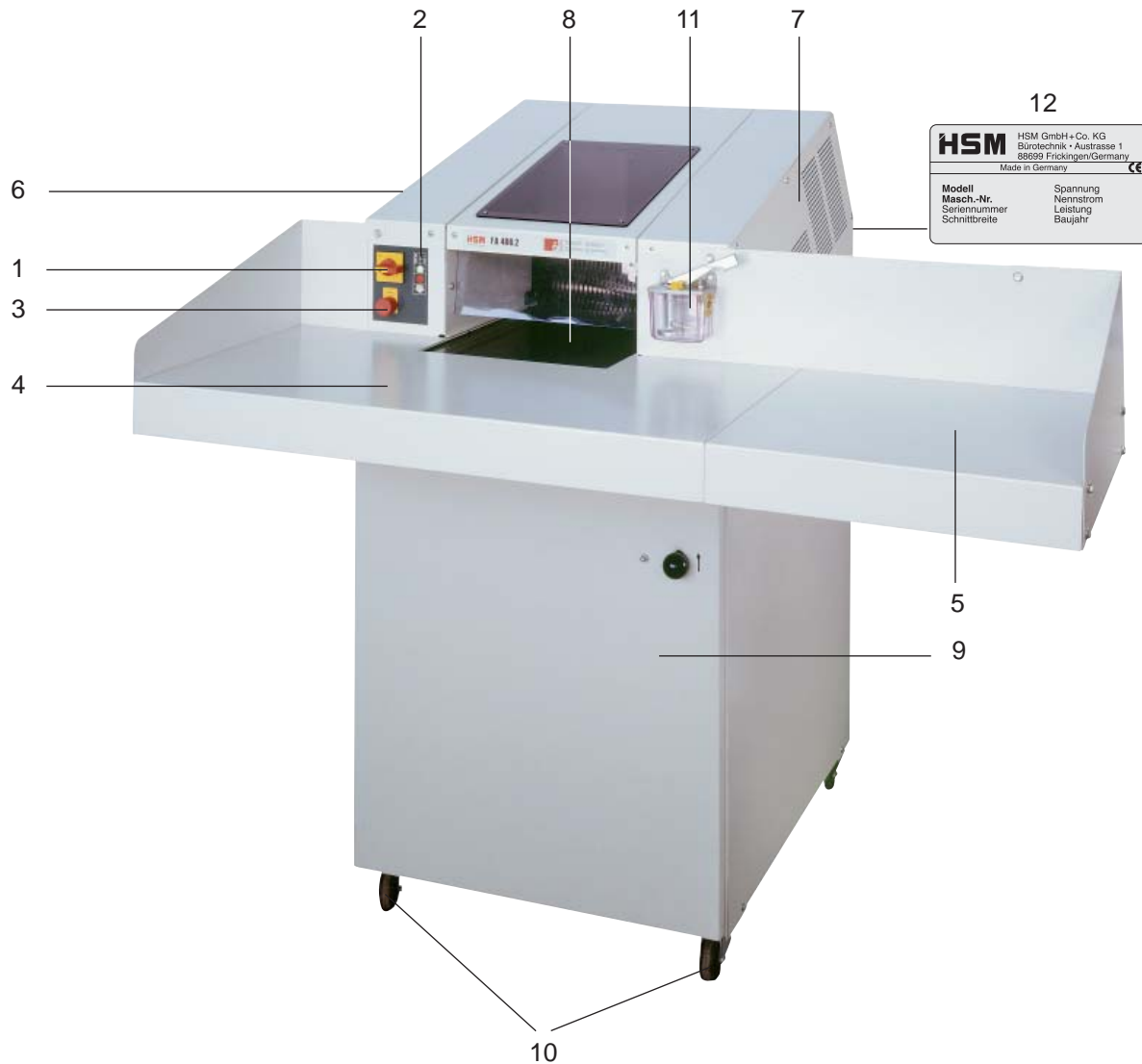
In the event of danger, press the emergency stop button immediately. This switches off the shredder, and stops the cutting block and feed belt.

Main switch (only Solo-version)



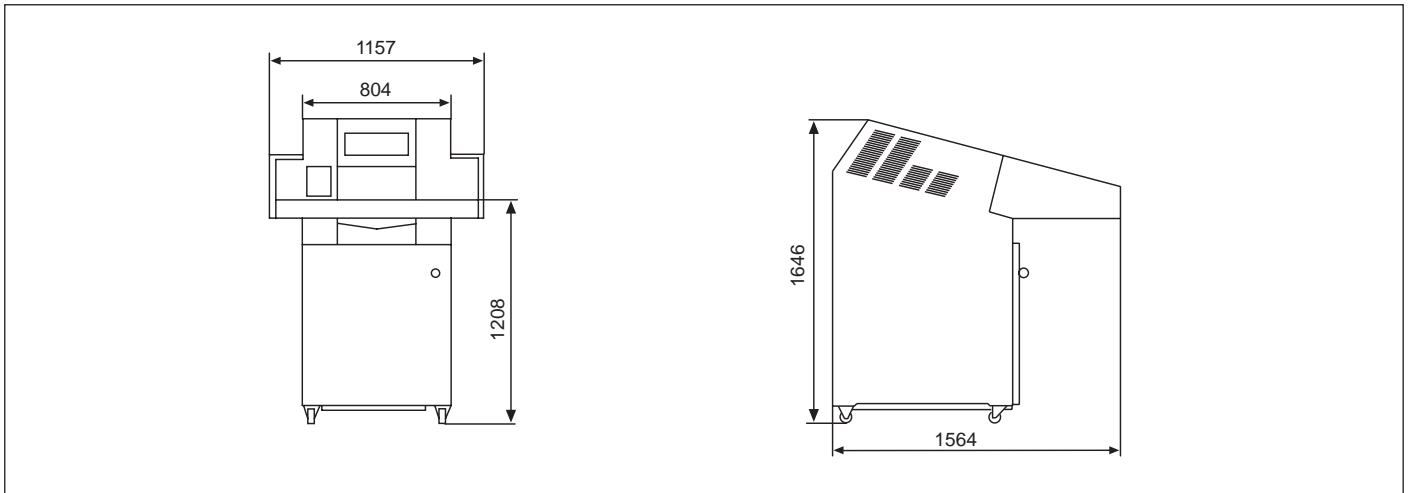
In the event of danger, turn the main switch to "0". You can secure the main switch in this position with a padlock to prevent restarting.

3. Overview

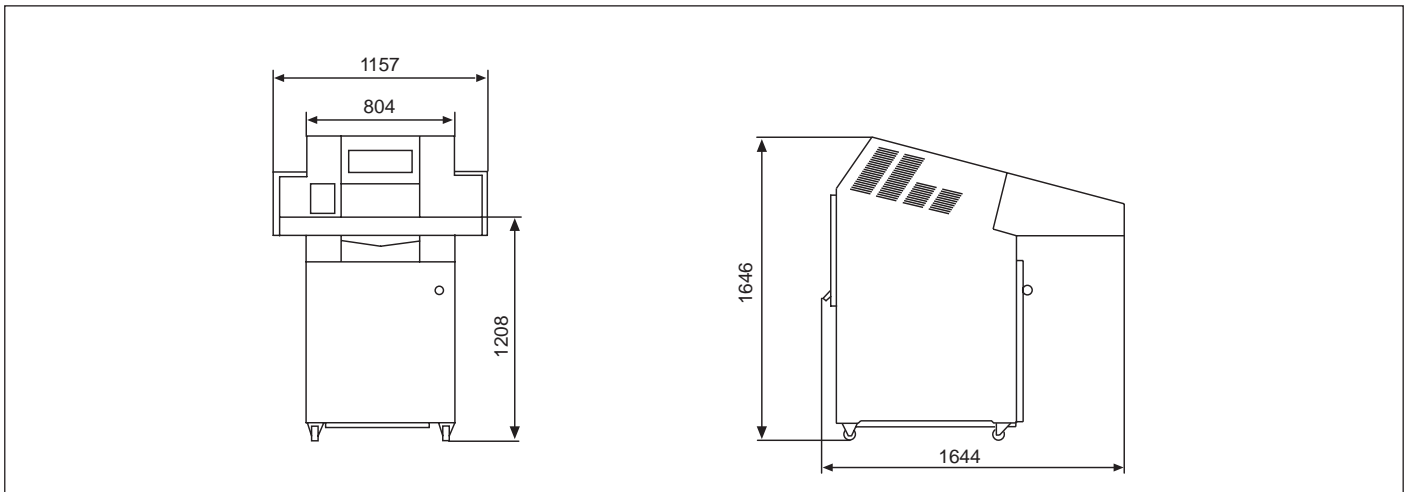


- 1 Main switch (only solo-version)
- 2 Keypad
- 3 Emergency stop button
- 4 Loading tray
- 5 Option: extra-wide work table
- 6 Left cover panel
- 7 Right cover panel
- 8 Intake conveyor,
paper feed opening
- 9 Front door
- 10 Braking swivel castors
- 11 Oiler on particle cut machines
- 12 Nameplate

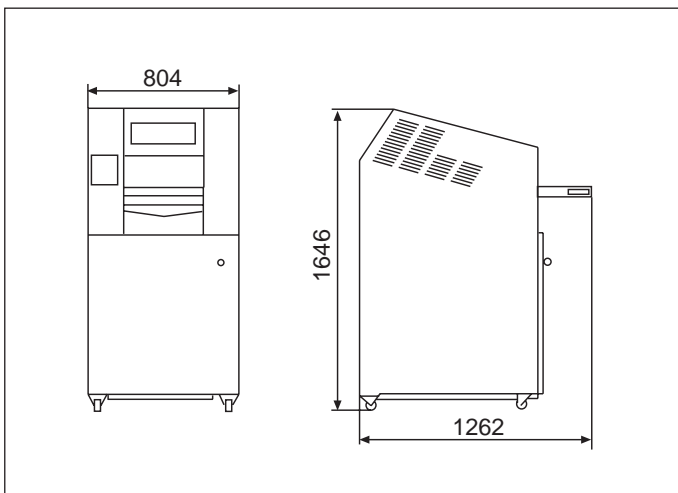
4. Dimensions



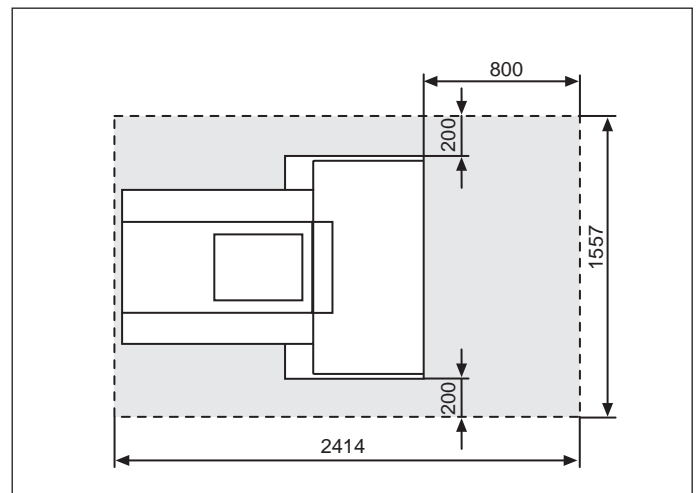
HSM FA 400.2 Solo version



HSM FA 400.2 Combi version



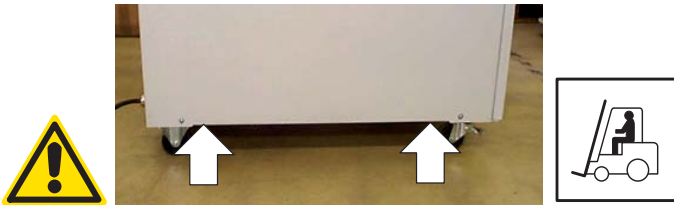
Transportation dimensions (without tray)



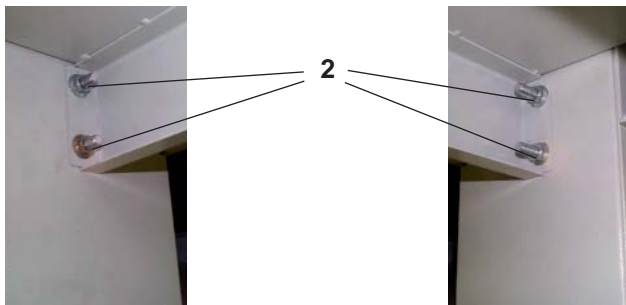
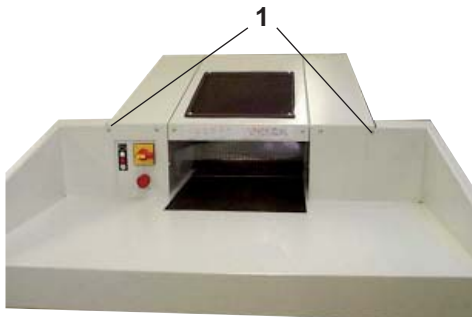
Space requirements for operation and maintenance

5. Transportation, installation

- Place the shredder in its packaging on a smooth, level surface.
- Remove the packaging.
- If you need to move the shredder through narrow doors, you can wait until it is at its final location before fitting the loading tray. Without the tray, the machine is only 805 mm wide.
- When moving the shredder, note that it may topple over.
- The shredder can be moved on its rollers. If using a forklift to transport a Solo machine, you must first remove the waste trolley. Then you can push the forks under the machine from the left or right side and lift it up.



- Fitting the loading tray:
Fasten the tray on both sides at the top with the Phillips screws (1) and at the bottom with the 2 nuts (2).

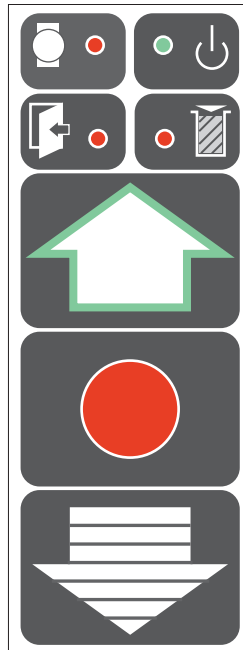


- The shredder may only be placed in dry rooms on a hard, level floor – not on carpets. The floor load on each roller is approximately 107 kg.
- Place the machine in such a way that the power plug is easily accessible and the ventilation slots are free.
- **Solo machine:**
 - Lock the front castors by pressing down the brake lever.
 - Connect the power plug of the shredder to the 32A CEE mains socket.
- **Combination version:**
 - Push the shredder up to the baling press until the press and the outlet chute of the shredder touch.
 - Bolt the shredder and the baling press together.
 - Lock the front castors by pressing down the brake lever.
 - Connect the power plug of the shredder to the combination socket of the baling press.
- The machine must be connected to a power source which meets the specifications on the nameplate.
- Make sure the power cable is unobstructed and that nobody can tread on it.
- No platforms or other raised surfaces may be placed near the shredder if they encroach on the specified safety clearances.

6. Operating and display elements on the keypad

Paper jam or overload
Red LED

Door open
Red LED



Ready for operation
Green LED

Waste bag full
Red LED

Start button

The shredder switches on.
The feed belt moves in the intake direction.

Stop button

The cutting block and feed belt stop.
The shredder is in standby mode.

Reverse button

The cutting block and feed belt run in reverse.

7. Start-up, inspecting the safety devices

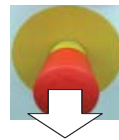
Attaching the waste bag (Solo version)

- Open the front door and pull out the waste trolley.
- You can modify the trolley from a double-chamber to a single-chamber system by removing the brackets (1).



- Put in a new waste bag and fold it approximately 20 cm over the top frame tube. When using a two-chamber system, make sure that there is also around 20 cm of plastic foil below the brackets (1).
- Push in the waste trolley and close the front door.

Switching on the shredder



- Pull out the emergency stop button.



- Solo-version: Turn the main switch to the I position.
Combination-version: Turn the main switch on the baling press to the I position.
▶ The green "Ready for operation" LED lights up.



Note:

There is a safety switch on the front door of the shredder. The machine can only be switched on when the door is shut.



- Press the green start button.
▶ The cutting block and feed belt start up.



Caution!

The feed belt can run in reverse if the phase wires in the power plug are incorrectly connected.

*Turn off the main switch immediately and pull out the power plug!
Have an electrician change two of the three phase wires*

Inspecting the safety devices

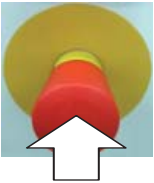


Check that the safety devices are working properly:

- At the start of each shift
- After any maintenance or repair work

Do not start the machine until you have checked the emergency stop button and the door switch and found them to be in perfect working order. If any defect arises during operation stop the machine immediately and make sure it is corrected.

Checking the emergency stop button



Press the emergency stop button while the machine is running. The shredder must switch off immediately. The cutting block and the feed belt must stop. The machine will only start again once you have pulled out the emergency stop button again.

Inspecting the door switch



- Open the front door.
 - ▶ The red "door open" LED must light up.
 - ▶ The cutting block and feed belt must stop.

After you close the door, the LED should go out and you can start the machine again by pressing the start button.



Shredding material



Place the material to be shredded on the loading tray and then place batches on the feed belt.

If material that is not supposed to be shredded is mistakenly placed onto the belt, never attempt to pull it out.



- Press the stop button.
 - ▶ The drive stops.



- Press the reverse button.
 - ▶ The cutting block and feed belt run in reverse.



- You can now remove the material from the belt and start the shredder again by pressing the start button.

Waste bag full



- ▶ The red LED on the keypad lights up. The shredder switches off automatically.



- Press the reverse button for approx. 3 seconds.
 - ▶ Part of the material is pulled back into the apparatus.
- Open the front door and shake the waste trolley.
 - ▶ The cut material spreads in the cut material sack and does not fall into the interior of the shredder.
- Pull the waste trolley out and change the cut material sack.
- Push the trolley back in and start the shredder again by pressing the green start button.



Stopping the shredder



- Press the stop button.
 - ▶ The cutting block and feed belt stop.
 - ▶ The shredder switches to standby mode.

Switching off the shredder



- Turn the main switch on the paper shredder or the baling press to **0**. You can secure the main switch in this position using a padlock.

8. Malfunctions

Check the following before calling customer service:

- Is the power plug connected?
- Is the shredder switched on?
- Is the front door closed?
- Is the waste bag full?
- Is there a paper jam in the shredder?
- Has the motor been overloaded?

Paper jam (excessive paper feed)



- ▶ The red LED on the keypad blinks
- ▶ The cutting block automatically runs in reverse for several seconds.



Caution!

The blade rollers can still cause injuries even while they are not running. Do not reach into the cutting apparatus! Wear safety gloves!

Do not alternately press the "Forwards" and "Reverse" buttons to remove the blockage. This will damage the shredder.

- Take out the pile of paper.
- Press the green start button and put less paper on the feed belt.



Electric motor overheated



- ▶ The red LED on the keypad lights up.
- ▶ The shredder switches off automatically.
- Let the motor cool down for 20 - 30 minutes.



- Press the green start button.

Door open



- ▶ The red LED on the keypad lights up.
- ▶ The shredder switches off automatically.
- Close the front door.



- Press the green start button.

9. Maintenance and care

Cleaning the cutting block

Strip cut machines: (1 x daily)

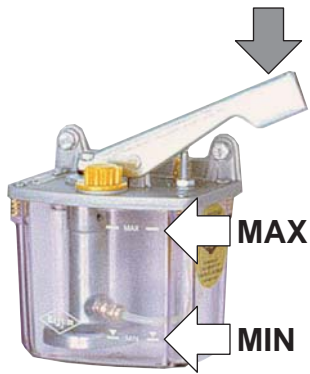


- Switch off the shredder.
- Squirt special cutting apparatus oil through the paper feed opening onto the blade rollers.
Order no. 1.235.997.401 for a 250 ml bottle
Order no. 1.235.997.500 for 5 litre container



- Let the cutting apparatus run forwards and backwards several times without feeding in any paper.
▶ This loosens paper dust and particles.

Cross cut machines:



If the cutting quality deteriorates or the machine becomes noisy:

- Let the shredder run without feeding in any paper.
- Push the lever of the oiler down several times.
- Make sure the oil level in the container is between the MIN and MAX markings.
Order no. 1.235.997.500 for 5 litre container

Checking the chain tension (twice yearly)

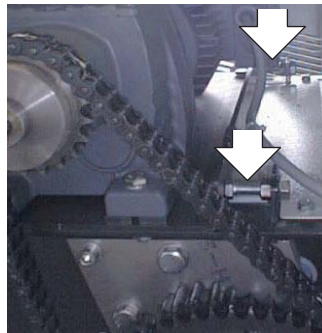
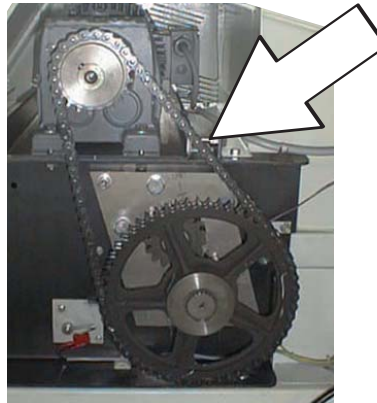


- Switch off the shredder.



- Pull out the power plug.
- Remove the tray and the left cover panel.

The sag of the chain should be 4 – 10 mm.



If you need to tighten the chain:

- Remove the right cover panel.
- Loosen the nuts and push the motor and the tensioning screws until the chain sags by 4 – 10 mm.
- Tighten the nuts again.
- Put the cover panels and the tray back on.



Note:

Do not tighten the chain too much, as this will cause premature wear on the chain and bearings.

Greasing the drive chains and cogs (twice yearly)



- Switch off the shredder.



- Pull out the power plug.
- Remove the tray and the cover panels.
- Grease the cogs and the drive chains from the motor to the cutting apparatus, the cutting block to the feed belt and the cutting block to the regulating roller.
Recommended lubricating grease: K2K in accordance with DIN 51502/DIN 51825
- Put the side cover panels and the tray back on.



You must check that the feed belt runs straight:

Switch on the shredder and let it run for 10 minutes. During this time, the feed belt must run in the middle of the snub roller. If it slips to the left or right edge, you must alter the setting of the snub roller.

Checking the feed belt for wear

The surface of the feed belt can become worn after long periods of use. If you can see the fabric inlay in the belt, it must be replaced. Please notify our customer service.

Cleaning the shredder:

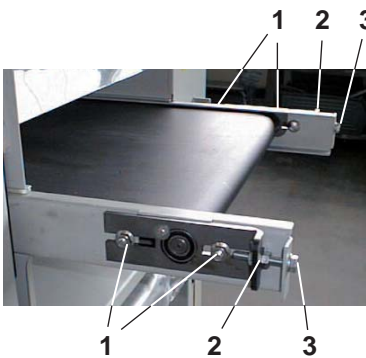
- Switch off the shredder and disconnect the power plug.
- Only use a soft cloth and mild soapy water for cleaning. Never use scouring agent, cleaning fluid, petroleum or thinners.

Tightening the feed belt

The feed belt should not slip when loaded with material.



- Switch off the shredder.



- Loosen the hex nuts (1) on the left and right sides of the snub roller.
- Loosen the lock nuts (2) of the tensioning bolts (3).
- Tighten the feed belt **evenly** using the tensioning bolts.



Note:



Only tighten the feed belt until it stops slipping. The feed belt bearing may be damaged if it is tightened too much.

- Tighten the hex nuts on the snub roller and the lock nuts on the tensioning bolts again.

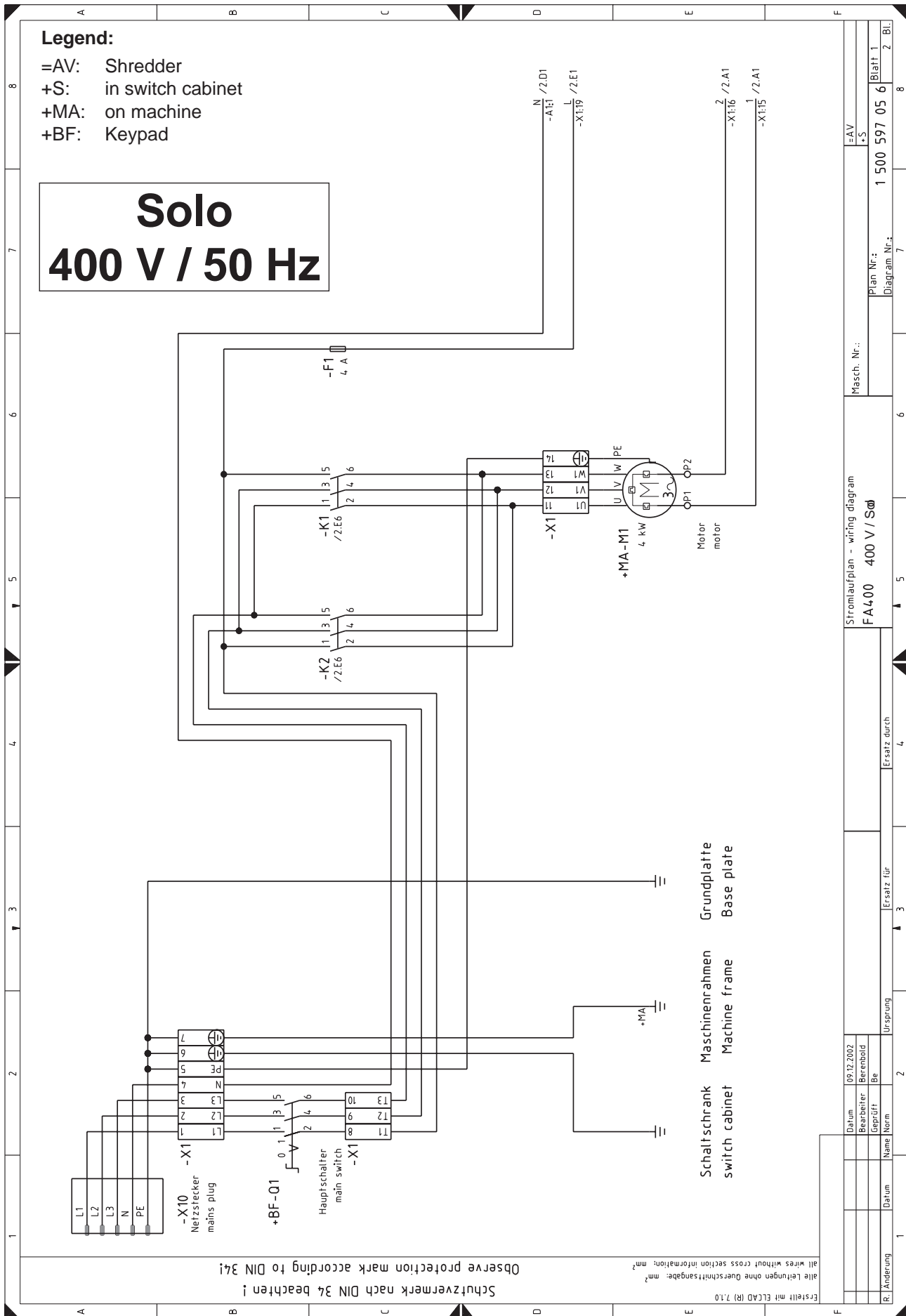
10. Scope of supply, accessories

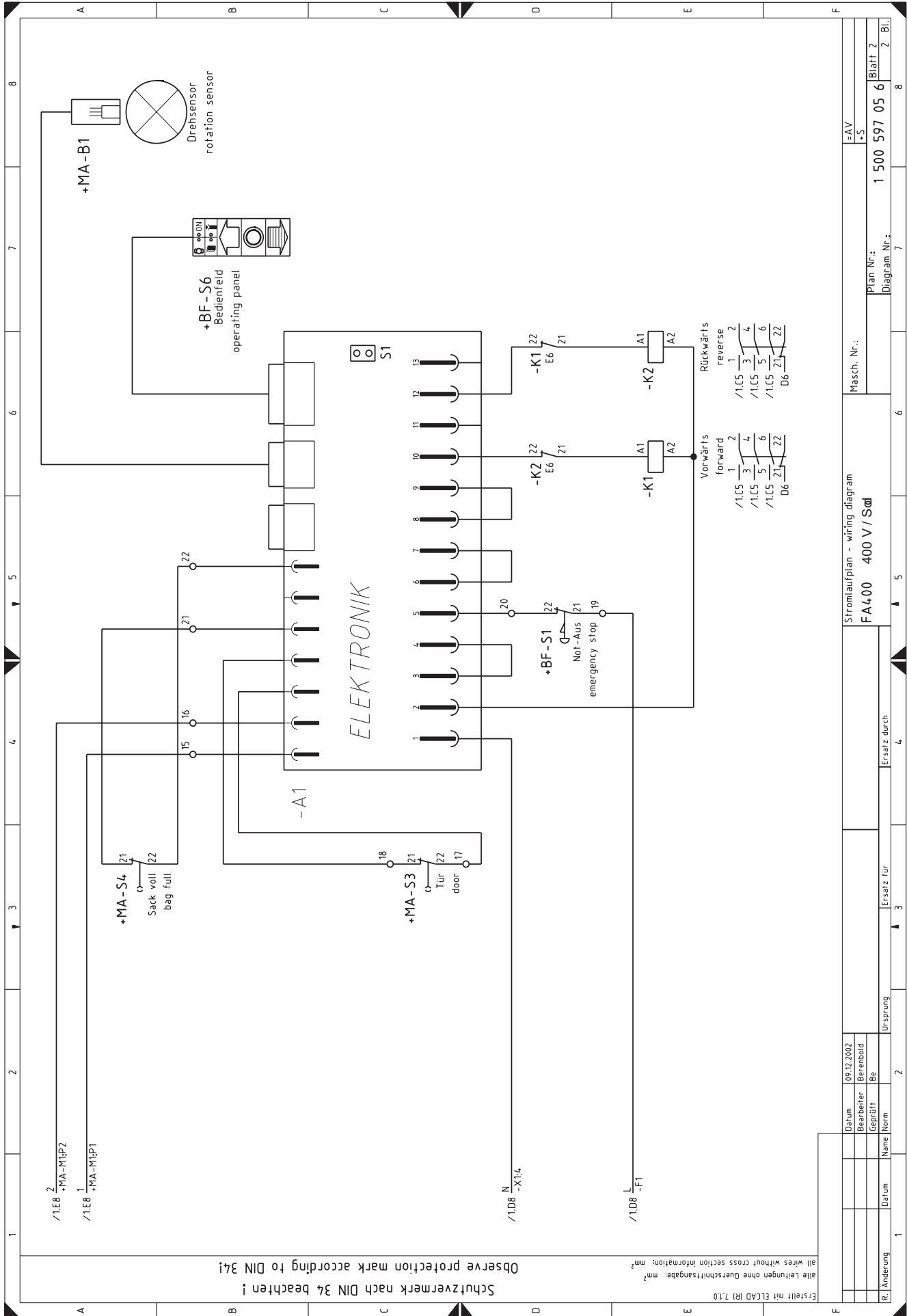
- Machine on pallet with a wooden frame, strapped with packing tape and packed in foil
- 4 waste bags, order no. 1.513.995.000 for 2-chamber system (Solo version)
- 1 waste bag, order no. 1.513.995.100 for 1-chamber system (Solo version)
- Special cutting block oil
For strip cut machines: 250 ml bottle, order no. 1.235.997.401
For cross cut machines: 5 l container with spout, order no. 1.235.997.500
- Operating manual
- Accessories: strip curtain, order no. 1.513.050.445

11. Technical data

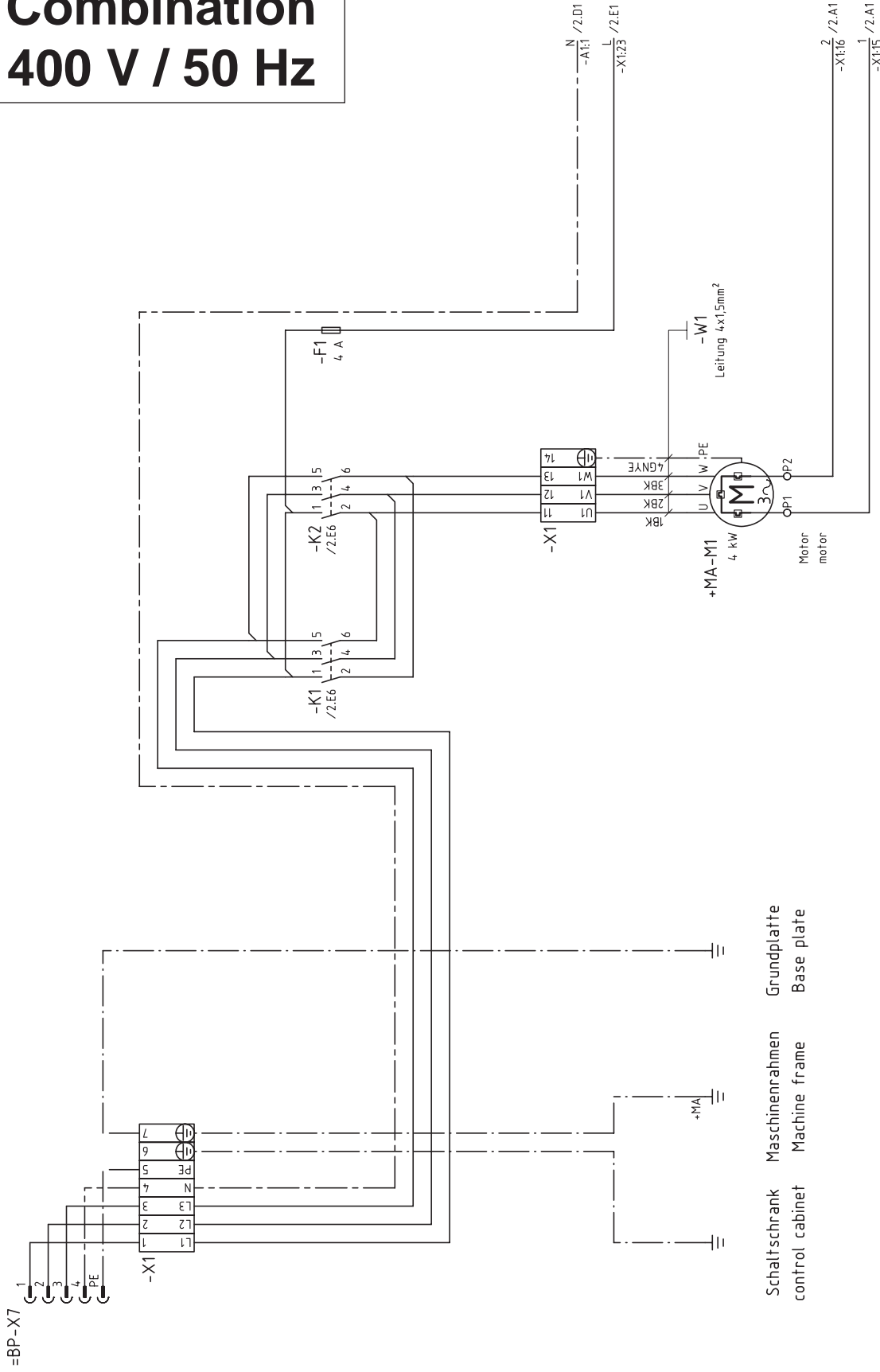
Cutting type	 Strip cut		 Cross cut
	Cut size (mm)	11,8	5,8
Safety level DIN 32757 – 1	1	2	3
Cutting capacity (sheets), DIN A4,	70g/m ²	180	120
	80g/m ²	144	96
Cutting speed	210 mm/s		220 mm/s
Effective width	428 mm		
Weight	approx. 425 kg		
Waste container volume (Solo machines)	460 l		
	1-chamber system	2 x 230 l	
2-chamber system			
Power supply	3 x 400 V, 50 Hz		
Rated power	4 kW		
Max. current	21 A		
Fuse rate	25 A		
Plug	CEE 32A		
Sound level (idling / under load)	61 dB(A) / 75 dB(A)		

12. Electric wiring diagrams





Combination 400 V / 50 Hz



Schaltschrank Maschinenrahmen Grundplatte
control cabinet Machine frame Base plate

Erstellt mit ELCAD (R) 7.3.0 SP3
alle Leitungen ohne Querschnittsangabe: mm²
alle Leitungen mit Querschnittsangabe: mm²
Schutzvermerk nach DIN 34 beachten!
Observe protection mark according to DIN 34!

a Drehfeld		Datum		09.12.2002		Masch. Nr.:		=AV	
Null/Neu		Be		06.02.2007		FA400		+S	
R. Änderung		Name		27.06.2003		Ersatz durch		Blatt 1	
		Norm				Ursprung		Blatt 2	
		Ersatz für				1 500 597 05 8		Diagram.Nr.:	
		Ersatz durch				1 500 597 05 8		Plan Nr.:	
		Ersatz durch				1 500 597 05 8		Diagram.Nr.:	

Declaration of Conformity

Machinery directive 98 / 37 / EG

EMC directive 89 / 336 / EWG

Low voltage directive 73 / 23 / EWG

The manufacturer **HSM GmbH + Co. KG**, Bahnhofstrasse 115, D-88682 Salem declares herewith, that the paper shredder (**Solo machine**) **HSM FA 400.2** corresponds with the above mentioned EC Machine Directive including all relevant modifications.

Applied standards and technical specifications:

- EN 60204-1:1997-12
- EN ISO 12100-2:2003-11
- EN 55014-1:200-10 + A1:2001-10 + A2:2002-10
- EN 61000-3-2:2000-12
- EN ISO 12100-1:2003-11
- EN 294:1992-06
- EN 55014-2:1997-02 + A1:2001-12
- EN 61000-3-3:1995-01 + A1:2001-06



Caution:

It is prohibited to operate only one machine of a combination-version machine. Only the combination of document shredder and HSM baling press fulfils the requirements of EN 294.

Salem, 01.12.2004

Rolf Gasteier - Technical Director

Machine type inspection for compliance with the requirements of the EC Machine Directive was carried out by the „Administration“/ Inspection Authority Committee of Experts, Subject Area „Office Machines and Devices“, on the premises of the Verwaltungs-Berufsgenossenschaft, Deelbögenkamp 4, D-22297 Hamburg. This inspection authority is the authority responsible in accordance with Annex V of the EC Machine Directive.